

Abstract of WO2004042338

The relative pressure sensor comprises two chambers (5, 6) and two separating membranes (2, 3) respectively provided for a process pressure and an ambient pressure. The chambers (5, 6) are separated by a pressure-sensitive element (4) (measuring membrane) and are filled with a transmission medium. In order to attenuate process-side overload pulses, which act upon the first separating membrane (2), a hydraulic damper (7) is provided that is placed on the side of the atmosphere between the second separating membrane and the pressure-sensitive element. The pressure-sensitive element is a piezoresistive silicon chip, the transmission medium consists of silicone oil, and the damper is comprised of a filter element made of sintered bronze having 29 % porosity and an 11 micrometer pore diameter. The filter element (7) has a length of 8 mm and a diameter of 2 mm.